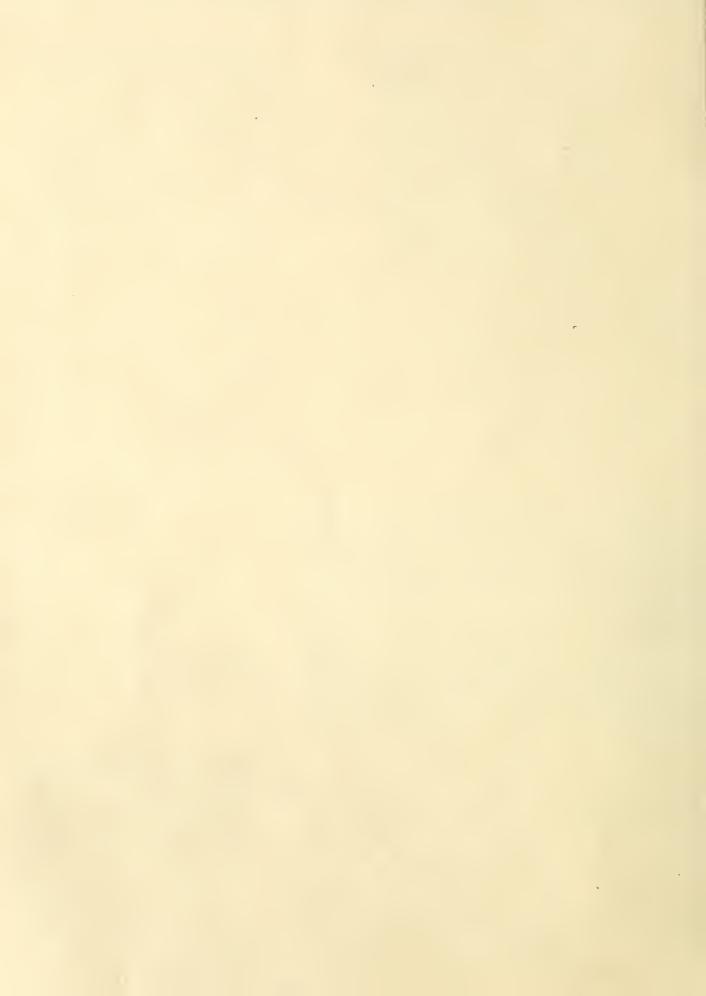
## **Historic, Archive Document**

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SENN PEST

The senn pest (Eurygaster integriceps) is a yellowish-brown insect that has lines of black dots on its back. It is a stinkbug, and resembles other stinkbugs that are already pests in this country. Its body is oval and about ½ inch long. The head is shaped like a wide triangle, rounded in front. These insects are easy to see on plants, but often drop quickly to the ground if disturbed.

The adults overwinter in the soil around roots of plants in hilly areas, and under debris in valleys. They return to the fields in the spring.

This insect is a serious pest of grain in the Middle East.

Damage: In spring, the adults feed on stems of young small grains, sorghum, grasses, and a few other plants. Later, adults and nymphs feed on the kernels. When young plants are attacked, they wilt and fail to develop. When the kernels are attacked, they do not fill out. The feeding also lowers the baking quality of the flour. A relatively small infestation can cause loss of an entire crop.

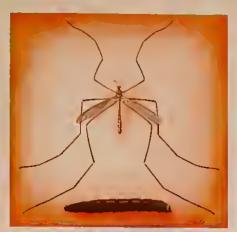


**NUTGRASS ARMYWORM** 

The larva of the nutgrass armyworm (Spodoptera exempta) is about 1 inch long. Its color varies, depending on where it lives. In Hawaii, its back has several light- and dark-green stripes, the legs and underside are light yellowish green, and the head is black.

The moth is usually brownish, has white rear wings, and has forewings patterned with white, black, and green. Wingspread is about 11/4 inches. The moth is active at night.

Damage: Larvae feed voraciously on small grains, corn, and grasses, causing extensive damage. In Hawaii, the larvae damage sugarcane. In Africa, where large outbreaks have occurred, it is one of the most important pests of cereals and grasses.



COMMON CRANE FLY

The adult common crane fly (Tipula oleracea) is gray, has a brownish midsection, and has transparent, gray brown wings. Its body is ½ to 1 inch long. The female has longer wings than the male. The adults are present from July to late September, and the females lay small, black eggs. The grayish-brown larvae begin hatching in late August, and grow to 1½ inches.

This insect is a pest in many parts of Europe.

Damage: Larvae feed underground during the day and above ground at night, and are especially numerous above ground when it is humid. They feed on green leaves of young plants and occasionally on the roots, sometimes damaging as much as two-thirds of a small grain crop; rice seedbeds may be completely destroyed. They also feed on cabbage, potatoes, strawberries, and other crops.



CEREAL LEAF MINER

The female moth of the ccreal leaf miner (Syringopais temperatella) lays tiny yellow eggs on leaves of small grains in April. When the larvae hatch, in a week or less, they are black. When mature, they are grayish yellow to brown, and only the head and rear are black. The larvae build small cocoons in the soil, where they remain until January.

The moth emerges in April and has a black body covered with yellowish hairs. Its wingspan is ½ to ¾ inch. The forewings are yellowish brown; those of the male have a brown ring near the tip.

This insect is a major pest of grains in the Middle East.

Damage: Larvae feed inside young leaves of wheat, barley, and oats, leaving only a thin, transparent outer layer of the leaf intact. Damage usually becomes noticeable in February and March. Feeding begins at the tip of a leaf and continues downward to the base. The leaves turn brown. From a distance, damage appears as yellowed or brown patches in fields of grain. Sometimes, an entire field is destroyed.

## WATCH FOR NEW SMALL GRAIN INSECTS

Help us find insects that slip past our quarantine barrier and attack wheat, cats, barley, and other small grains.

Plant quarantine inspectors watch for destructive insects at seaports, international airports, and border crossings. They intercept thousands of insects each year. But, some insect pests slip past our quarantine barrier. These are the insects that we want you to help us find.

If we find destructive insects early, before they become numerous, we can keep them in a small area and control them. We may even be able to get rid of them.

Read the descriptions of insects that threaten small grains.

and study the illustrations.

If you find insects or damage like that described here, or that you do not recognize, call your county agricultural agent or your local, State, or Federal plant pest control official.

These small grain insects are pests in areas of the world that ship large quantities of products to the United States. If any of these insects were to enter the United States and become established here, the resulting loss in small grains—and in the cost of control measures—could be tremendous.

Help us protect your small grain crop from foreign insect attack. Watch for new small grain insects.



## WHEAT CHAFER

The adult wheat chafer (Anisoplia austriaca) is dark green, has brown wing covers, and is ½ to ¾ inch long. The underside of its body is covered with gray hairs. It feeds on heads of grain during the day; in the evening it goes down to the ground. The adults are active on hot, sunny days from mid-June to early July; but in cloudy, windy, or rainy weather they do not move about. The female lays small masses of eggs 4 to 6 inches in the ground where the soil is loose. The larva is whitish and about 1 inch long.

This insect is a pest in eastern Europe and the Middle East.

Damage: Larvae feed on roots of many different plants. The adults feed on kernels of ryc, winter wheat, spring wheat, and other grains and grasses. Hard varieties of wheat are particularly susceptible; a large infestation may destroy as much as 40 percent of a crop.

## WHEAT BULB FLY

The adult wheat bulb fly (*Hylemya coarctata*) is yellowish gray, has yellowish wings, and is about 3/8 inch long. Veins in the wings are yellowish brown. The male has black markings on its body.

The adults appear in midsummer. The females lay creamy-white eggs, which hatch in January or early February. The larva is white and about 3/4 inch long when mature.

This insect is a pest throughout most of Europe.

Damage: Larvae feed in the hollow center of stems of winter wheat, and sometimes winter rye and barley. They usually enter stems just below ground level and crawl upward, feeding as they go. The stems usually turn brown within 24 hours of attack, and later break. Large-scale infestations have been known to destroy more than 40 percent of the crop.





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